

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

17

INFORMATION

TOPIC

**Proposed Rule – Chapters 50-54 – Water Use and Water Allocation
Rules**

The Commission will be asked to review a draft Notice of Intended Action to amend the following chapters of the Iowa Administrative Code (IAC):

Chapter 50: Scope of Division—Definitions—Forms—Rules of Practice

Chapter 51: Water Permit or Registration—When Required

Chapter 52: Criteria and Conditions for Authorizing Withdrawal, Diversion and Storage of Water

Chapter 53: Protected Water Sources — Purposes — Designation Procedures—
Information in Withdrawal Applications — Limitations —List of Protected Sources

Chapter 54: Criteria and Conditions for Permit Restrictions or Compensation by Permitted Users to Nonregulated Users due to Well Interference.

This proposed rulemaking will be brought back to the Commission as early as next month. Approval to initiate rulemaking will be requested at that time.

These chapters pertain to the water use/water allocation program, which is a permit program that was administered by the Natural Resources Council until its merger in 1983 with the agency now called the Department of Natural Resources. Few changes have been made to the program or its rules since that time. Administratively, the rules are out-dated and changes are needed. The administrative updates include eliminating expired dates, updating references, eliminating obsolete sections, and clarifying existing language in the rules. Other changes to these chapters are proposed as follows:

- clarifying existing definitions, including correcting the definition of public water system usage to consumptive use (Ch. 50);
- adopting definitions for specialty and general crops (Ch. 50);
- updating forms and clarifying usage of the forms in the rules (Ch. 50);
- correcting the references to Iowa's Geological Survey, certified well contractor, and licensed professional engineer (all chapters)
- eliminating the requirement for the IDNR's Flood Plain Section to review a surface runoff plan at a rock quarry (Ch. 50);
- incorporating new legislation that requires water use permits for community public water supplies to be posted in the paper of largest circulation in the county as well as the paper nearest the locale of the permittee (to comply with new 2005 Iowa Code requirement) (Ch. 50);
- clarifying the water use permitting of cooling/heating systems using groundwater (Ch. 51);
- exempting public water system consumptive usage from the protected flow restrictions (Ch. 52);

- removing the protected streamflow at six listed "protected water use" locations (Ch. 52); and
- modifying the emergency conservation rules to be consistent with other sections of the administrative code (Ch. 52).

These preliminary amendments to the rules were presented to a water use stakeholder advisory group during one large-group meeting. Three small-group meetings were held to further discuss the proposed rule changes. The stakeholder advisory group was comprised of individuals representing a wide variety of stakeholders, including public drinking water organizations, energy production, cities, environmental interests, well drillers, aggregate (sand & gravel) producers, conservation interests, agribusiness (animal and crop production), irrigators, turfgrass production, golf courses, consulting engineers, federal geological service, and other state agencies. The initial large-group meeting notice was posted on the State of Iowa public notice website, and the meeting presentations and handouts (including draft rules) were posted on the IDNR Water Use website.

Charles C. Corell
Chief, Water Quality Bureau
Environmental Services Division

December 23, 2005

ENVIRONMENTAL PROTECTION COMMISSION

Notice of Intended Action

Pursuant to the authority of Iowa Code sections 17A.3, 455B.105, 455B.171, 455B.261, 455B.262, 455B.264 through 455B.274, 455B.278, 455B.279, 455B.281, and 460, the Environmental Protection Commission hereby gives Notice of Intended Action to amend the following chapters of the Iowa Administrative Code: Chapter 50, "Scope of Division-Definitions-Forms-Rules of Practice," Chapter 51, "Water Permit or Registration – When Required," Chapter 52, "Criteria and Conditions for Authorizing Withdrawal, Diversion, and Storage of Water," Chapter 53, "Protected Water Sources — Purposes — Designation Procedures—Information in Withdrawal Applications — Limitations —List of Protected Sources," and Chapter 54, "Criteria and Conditions for Permit Restrictions or Compensation by Permitted Users to Nonregulated Users due to Well Interference."

These chapters pertain to the water use/water allocation program, which is a permit program that was administered by the Natural Resources Council until its merger in 1983 with the agency now called the Department of Natural Resources. Few changes have been made to the program or its rules since that time, and revisions are needed. The administrative updates include eliminating expired dates, updating references, eliminating obsolete sections, and clarifying existing language in the rules. Other changes to these chapters are proposed as follows:

- clarifying existing definitions, including the definition of consumptive use as it applies to community public water supply systems (Ch. 50);
- adopting definitions for specialty crop and general crop (Ch. 50);
- updating forms and clarifying usage of the forms in the rules (Ch. 50);
- correcting the references to Iowa's Geological Survey, certified well contractor, and licensed professional engineer (all chapters)
- eliminating the requirement for the IDNR's Flood Plain Section to review a surface runoff plan at a rock quarry (Ch. 50);
- incorporating new legislation that requires water use permits for community public water supply systems to be posted in the paper of largest circulation in the county as well as the paper nearest the locale of the permittee to comply with new requirement (2005 Iowa Acts HF768, pertaining to Iowa Code section 455B.265) (Ch. 50);
- clarifying the water use permitting of cooling/heating systems using groundwater (Ch. 51);
- exempting public water system consumptive usage from the protected flow restrictions (Ch. 52);
- removing six "protected water use" locations from the protected streamflow table (Ch. 52); and
- modifying the emergency conservation rules to be consistent with other sections of the administrative code (Ch. 52).

These preliminary amendments to the rules were presented to a water use stakeholder advisory group during one large-group meeting on October 6, 2005. Three small-group meetings were held to further discuss the proposed rule changes. The stakeholder advisory group was comprised of individuals representing a wide variety of

stakeholders, including public drinking water organizations, energy production, cities, environmental interests, well drillers, aggregate (sand & gravel) producers, conservation interests, agribusiness (animal and crop production), irrigators, turfgrass production, golf courses, consulting engineers, federal geological service, and other state agencies. The initial large-group meeting notice was posted on the State of Iowa public notice website, and the meeting presentations and handouts (including draft rules) were posted on the IDNR Water Use website.

Any interested person may make written suggestions or comments pertaining to the proposed rule revisions on or before April 12, 2006. Such written materials should be directed to Diane Moles, Water Supply Engineering Section, Iowa Department of Natural Resources, 401 SW 7th Street, Suite M, Des Moines, IA 50309-4611; fax 515/725-0348 or diane.moles@dnr.state.ia.us. Persons wishing to convey their views orally should contact her at 515/725-0281.

When submitting comments, the Water Supply Engineering Section encourages you to utilize the following guidelines. These guidelines aid in accurately understanding and creating a record of your input.

1. Include your mailing address and contact information.
2. Please state if you are submitting comments as an individual or on behalf of a municipality, business, or organization.
3. Cite the specific rule(s) on which you are commenting.
4. Explain your views as clearly as possible by describing any assumptions, data, or technical information you utilized.
5. Provide specific examples to illustrate your concerns.
6. Offer alternative language that you think would improve the specific rule(s) and explain why.

A public hearing will be held on April 5, 2006 at 10:00 a.m. in the conference room at the IDNR Water Supply office at 401 SW 7th Street, Suite I, Des Moines, IA, 50309, at which time persons may present their views either orally or in writing. At the hearing, persons will be asked to give their names and addresses for the record and to confine their remarks to the subject of the rule.

Any persons who intend to attend the public hearing and have special requirements, such as hearing or mobility impairments, should contact the Department of Natural Resources to advise of special needs.

These amendments are intended to implement Iowa Code section 17A.3(1)“b,” chapter 455B division III part 4, sections 455B.105, 455B.171, and 460.

The following amendments are proposed.

ITEM 1. Amend rule 567—50.2(455B) as follows:
Amend the following definitions:

“Certified well contractor” means a well contractor ~~certified by the department who has successfully passed an examination prescribed by the department to determine the applicant’s qualifications to perform well drilling or pump services or both pursuant to 567—Chapter 82.~~

“Consumptive use” means any use of water which involves substantial evaporation, transpiration, incorporation of water into a product or removal of water from a source without return thereto. Consumptive uses include, but are not limited to, irrigation, evaporative cooling, and flooding of wildlife areas by withdrawals or diversions from watercourses or aquifers. ~~Water use by community public water supplies is not considered to be consumptive in the administration of rules 567—52.3(455B), 52.4(455B) and 52.8(455B).~~

“Controlled aquifer test” means a test, as approved by the department, for the pumping from a well at a controlled rate for a specified duration while water levels are accurately measured at given frequencies in the pumping well and other nearby wells which use the same aquifer. ~~Data collected from such a test is suitable for determining aquifer hydrologic properties.~~

“Industrial use” means a use of water by manufacturing, processing, commercial, and other industrial facilities incidental to providing a product or a service; excluding domestic use, irrigation use, livestock use, non-industrial power generation use, and recreational and aesthetic use. Examples include but are not limited to manufacturing, food processing, industrial cooling, excavation and processing of rock and gravel products, commercial laundries, cooling of perishables and electrical power generation other than for public consumption.

“Irrigation use” means a use of water which is artificially applied to land to aid the growing of general farm crops ~~(hay, corn, soybeans, oats, grain sorghum and wheat)~~ and specialty crops.

“Livestock use” means a use of water in the production of ~~domestic~~ animals such as for drinking, sanitation and cooling.

“Protected source” means a surface water or groundwater source recognized by rule as ~~deserving~~ needing special protection in order to ensure its long-term availability, in terms of either quality or quantity, or both, to preserve the public health and welfare.

“Recreational and aesthetic use” means a use of water which can be ~~easily~~ curtailed and is not essential for the preservation of life, the general welfare, or the state’s economic base. Examples include but are not limited to flooding of wildlife areas; filling of pools and fountains; nonessential cooling; car washing; street cleaning; washing of other exterior surfaces such as windows and walls; amusement park-type water rides; turf watering such as lawns, golf courses, athletic fields; and watering of landscape plantings.

“Sufficient water supply” means a nonregulated well which is capable of providing enough water for the nonregulated use. ~~When considering a new water supply, acceptable water quality relative to the old water supply is also a factor.~~

“Uses that were nonregulated prior to July 1, 1985” means beneficial uses of water in excess of 25,000 gallons per day by:

1. Any person of the surface flow from streams bordering the state.

2. Any municipal corporation or person supplying a municipal corporation which had not increased its maximum per day use of water by 100,000 gallons, or 3 percent, whichever is greater, than its highest per day beneficial use prior to May 16, 1957; had not utilized a new source of water after May 16, 1957; and had not moved its withdrawal points more than one half mile from withdrawal points utilized prior to May 16, 1957.

3. Any self-supplied industrial user of water which was located within the territorial boundaries of a municipal corporation on May 16, 1957; had not increased its maximum

per day use of water by more than 3 percent above its highest per day beneficial use prior to May 16, 1957; had not utilized a new source of water after May 16, 1957; and had not moved its withdrawal points more than one half mile from withdrawal points utilized prior to May 16, 1957.

4. ~~Any other self-supplied user of water which was located within the territorial boundaries of a municipal corporation on May 16, 1957; had not increased its maximum per day use of water above its highest per day beneficial use prior to May 16, 1957; had not utilized a new source of water after May 16, 1957; and had not moved its withdrawal points more than one half mile from withdrawal points utilized prior to May 16, 1957.~~

Adopt the following new definitions:

“*General crop*” means hay, corn, soybeans, oats, grain sorghum or wheat.

“*Specialty crop*” means all other crops not listed as a general crop, including but not limited to melons, sod farm or seed corn.

ITEM 2. Amend rule 567—50.3(455B) as follows:

50.3(1) *Application forms.* The following application forms are currently in use:

~~Form 16: Application for Permit to Divert, Store, or Withdraw Water for Beneficial Use. 1/84. 542-3105.~~ Application for a New Water Use Permit or to Modify an Existing Water Use Permit. 542-3106.

~~Form 17: Application for Permit to Use Water for Irrigation. 1/84. 542-3106.~~

~~Form 18: Application for Permit to Store Water for Beneficial Use. 7/83 542-3109.~~

~~Form 19: Application for Permit to Divert or Withdraw Water for Production and Processing of Sand, Gravel, or Rock Materials. 1/84. 542-3110.~~

~~Form 20: Registration of Minor Nonrecurring Use of Water. 7/84. 542-3112.~~

Form 542-1470: Water Supply Section Water Use Permit Renewal.

Form 542-1539: Application for Use of an Agricultural Drainage Well.

50.3(2) *Supplementary information forms.* The following forms are used to obtain additional information to supplement various types of applications:

~~Form 16-1: Supplement to Application for Permit to Divert, Store, or Withdraw Water for Beneficial Use. 6/85. 542-3262.~~

~~Form 17-1: Supplement to Application for a Permit to Use Water for Irrigation Use from Reservoirs. 7/83. 542-1007.~~

~~Form 17-2: Supplement to Application for a Permit to Use Water for Irrigation Use from Wells. 7/83. 542-3107.~~

~~Form 17-3: Supplement to Application for a Permit to Use Water for Irrigation Use from Streams. 7/83. 542-3108.~~

~~Form 19-1: Supplemental Data for Application for Permit to Divert or Withdraw Water for Production and Processing of Sand, Gravel, or Rock Materials. 7/83. 542-3111.~~

Form 21: Survey of Land Owners and Occupants. 542-3113.

Form 22: Well Inventory Form. 542-3114.

Form 122: Water Well Inspection Report.

50.3(3) Reporting forms. The following forms ~~are~~ is for reporting permitted activities:
Form 23: Report of Water Use by all Regulated Users ~~Except Irrigators and Producers of Sand, Gravel, or Rock Aggregate.~~ 7/83. 542-3115.

~~Form 24: Report of Water Use for Irrigation. 12/83. 542-3116.~~

Form 25: Report of Water Use for Aggregate Production or Mining. 7/83. 542-3117.

~~Form 26: Water Permit Validation Form. 7/83. 542-1008.~~

~~Form 27: Water Level Measurement Report Form. 7/83. 542-1009.~~

ITEM 3. Amend tagline in subrule 567—50.4(1) as follows:

50.4(1) ~~Form of application~~ Application Form.

ITEM 4. Amend paragraph 567—50.4(1)"a" as follows:

a. Application for approval of a new withdrawal, diversion or storage of water unrelated to the use of an agricultural drainage well. For withdrawals, diversions, or storage of water unrelated to the use of an agricultural drainage well, a request for a new permit as distinguished from modification or renewal of an existing permit shall be made on ~~a form obtained from the department~~ Form 16 (542-3106). An application form must be submitted by or on behalf of the owner, lessee, easement holder or option holder of the area where the water is to be withdrawn, diverted or stored, and used. An application must be accompanied by a map portraying the points of withdrawal or diversion and storage, and the land on which water is to be used oriented as to section, township, and range. One application normally will be adequate for all uses on contiguous tracts of land. Tracts of land involved in the same operation separated only by roads or railroads will be deemed contiguous tracts.

ITEM 5. Amend paragraph 567—50.4(1)"c" as follows:

c. Application for modification or renewal of a permit. A request for renewal of a permit ~~need not~~ should be submitted on ~~an application~~ Form 542-1470. ~~A letter identifying the permittee and permit number and requesting renewal is sufficient. To request modification of a permit, which the letter must also clearly identify each modification desired and the reasons why each modification is needed.~~ A request to modify an existing permit shall be made on Form 16 (542-3106). The modification request must include an explanation of why the modification is necessary.

ITEM 6. Rescind and reserve paragraph 567—50.4(1)"d".

ITEM 7. Amend subrule 567—50.5(2) as follows:

50.5(2) Application to withdraw groundwater. Evaluation of the potential effects of a proposed withdrawal of groundwater requires review of available hydrogeological information ~~to identify the additional information which the applicant is responsible for providing.~~ The department may require additional supporting hydrogeological information, which the applicant is responsible for providing. ~~To the extent practical the department will screen applications for permits to withdraw groundwater by dividing~~

~~them into two classes according to whether potential effects can be predicted with reasonable confidence from available information.~~

ITEM 8. Amend preamble to 567—50.6 as follows:

567—50.6(17A,455B) Supporting information. Applicants shall submit supporting information which is reasonably required to assist the department in conducting the investigation of an application required by Iowa Code section 455B.264 and Iowa Code section 455B.281 and in determining whether granting of a permit would be consistent with the policies and principles of beneficial use set forth in Iowa Code section 455B.262. ~~Forms for submitting routinely required supporting information are listed in 50.3(17A,455B). In addition,~~ Certain supporting information requirements are described in this rule. This description is intended to identify frequently required information; ~~it is not intended to be exhaustive.~~ The department may require additional information relative to the permit application that it deems necessary.

ITEM 9. Amend paragraph 567—50.6(1)"a" as follows:

50.6(1) Application for permit to withdraw groundwater.

a. Identification of source and effects of pumping. An applicant shall be required to submit information needed by the department to identify the aquifer(s) from which withdrawals of water are proposed, predict the effects of pumping with a reasonable degree of confidence, and determine any permit conditions for well interference pursuant to 567—Chapter 54. At many locations the only reliable methods to determine the availability of a water source of adequate quantity and quality and to predict the effects of pumping require test drilling, yield test pumping, and a controlled aquifer test with measurements in one or more observation wells conducted ~~under appropriate supervision~~ with prior approval in a manner that is acceptable to the department. The applicant shall be required to perform each of these exploratory operations to the extent necessary for the department to obtain information from which to determine whether a permit should be granted and to identify conditions which should be imposed in any permit granted. The following requirements apply to exploratory drilling and test pumping.

(1) *Test drilling.* In cases where test drilling is needed for geological information relevant to the application, the applicant is responsible for employing a driller who will collect, bag and properly label cutting samples at each five-foot interval and at each apparent change in geological formation from a test hole or production well hole at least the approximate depth of the proposed production well. The cutting samples must be saved for collection by the department in sample bags provided by the department's Iowa geological survey ~~bureau of the department.~~ The samples shall be accompanied by a driller's log showing the location and total depth of the hole and a description of the materials encountered at successive intervals.

(2) *Yield testing.* An applicant shall be required to construct a well and test pump it for yield to the extent necessary to determine whether water is available at the applicant's proposed rate of withdrawal from the proposed source. A written registration from the department is required before any yield test in which more than 25,000 gallons will be withdrawn in a period of 24 hours or less (see 567—~~Chapter 51.6(5)~~).

(3) *Controlled aquifer test with supervision.* An applicant shall be required to conduct a controlled aquifer test with supervision by a registered certified well driller contractor,

~~registered~~ licensed professional engineer or other designee of the department as a condition of obtaining a water permit if the department, ~~after consultation with the department,~~ finds an aquifer test necessary to determine the effects which the proposed withdrawals have on other water uses. The applicant may be required to construct, develop, and maintain adequate observation wells for use in an aquifer test and for subsequent water level measurements or water quality monitoring. An applicant shall be responsible for obtaining a registration for an aquifer test as provided in 567—Chapter 51.6(5).

ITEM 10. Amend subrule 567—50.6(2) as follows:

50.6(2) *Application for an irrigation permit.* An applicant who proposes to irrigate ~~row crops in a field~~ on land which includes soils more erodible than Capability Subclass Iie as defined by the U.S.D.A. ~~Soil Conservation Service (S.C.S.)~~ Natural Resources Conservation Service (NRCS), or slopes greater than 6 percent where a modern ~~S.C.S. NRCS~~ Soil Survey is not available, shall submit a soil conservation plan prepared with the assistance of ~~S.C.S.~~ the NRCS for the ~~field~~ land in which ~~row-crop~~ irrigation is proposed. The plan shall be accompanied by the applicant's written explanation of how operation of the proposed irrigation system will be compatible with the conservation plan. ~~However, the department may waive the requirement of a formal soil conservation plan if the erodible area of the field is small and the potential for violation of soil loss limits established by the soil conservation district is minimal.~~

ITEM 11. Amend subrule 567—50.6(3) as follows:

50.6(3) *Application for permit to dewater a rock quarry.* Iowa Code section 455B.268 and 567—Chapter 51 require that a permit be obtained before diverting water or material from the surface directly into any underground watercourse or basin. When the department investigates an application for a permit to pump water for dewatering of a quarry excavated in carbonate rock, the department shall consider the potential for pollution of an underground watercourse or basin from drainage of surface water into the quarry. If available information, including topographic and subsurface geological information, support a finding that drainage of surface water into the quarry would constitute a violation of the permit requirement in Iowa Code section 455B.268 and might cause pollution of an underground watercourse or basin if not controlled, then the department shall require that the applicant either request a permit to authorize a drainage of surface water into the quarry, or construct and maintain a means of controlling surface water which would otherwise drain into the quarry. Examples of suitable methods of controlling surface drainage are low berms or artificial drainage ways constructed as needed to reduce runoff of surface water from adjacent land into the quarry. ~~If a rock quarry site is located on a flood plain, the surface runoff control plan will be reviewed by the flood plain branch to ensure that diversion structures do not adversely affect the efficiency or unduly restrict the capacity of the floodway of the adjacent stream or otherwise violate the statutory criteria contained in Iowa Code sections 455B.264 and 455B.275.~~

ITEM 12. Amend subrule 567—50.6(4) as follows:

50.6(4) *Application for permit to divert water into an aquifer not related to the use of an agricultural drainage well.* An applicant for a permit to divert water or any other material from the surface into an aquifer not related to the use of an agricultural drainage well shall submit information showing that the requested diversion will not ~~pollute~~ alter the quality of the aquifer.

ITEM 13. Rescind and reserve subrule 567—50.6(5).

ITEM 14. Amend paragraph 567—50.7(3)"a" as follows:

a. New permits and modifications of permits.

1. Applicable to all except community public water supplies. Before issuance of a permit to withdraw, divert or inject water the department shall publish notice of recommendation to grant a permit. The notice shall summarize the application and the recommendations in the summary report. The notice shall allow 20 days to request a copy of the summary report and submit comments on the report. The department may extend the comment period upon request for good cause ~~shown~~. The notice shall be published in a newspaper circulated in the locality of the proposed water source. The notice shall be sent ~~by ordinary mail, first class,~~ to any person who has requested to be placed on the notification mailing list in 567—Chapter 4 to receive notices of recommendation to grant permits within specified counties, and to any person who has requested a copy of the notice concerning the particular water use under consideration.

2. Applicable only to community public water supplies. Prior to the issuance of a permit to withdraw, divert or inject water to a community public water supply, the department shall publish a notice of recommendation to grant a permit. The notice shall allow 20 days to request a copy of the summary report and submit comments on the report. The department may extend the comment period upon request for good cause. The notice shall include a brief summary of the proposed permit and shall be published in a newspaper of general circulation within the county of the proposed water source as provided in the Code of Iowa section 618.3. If the newspaper of general circulation is not the newspaper of the nearest locality to the proposed water source that publishes a newspaper, the notice shall also be published in the newspaper of the nearest locality to the proposed water source that publishes a newspaper and the department may charge the applicant for the expenses associated with publishing the notice in the second newspaper. The notice shall be sent to any person who has requested to be placed on the notification list in 567—Chapter 4 to receive notices of recommendation to grant permits within specified counties, and to any person who has requested a copy of the notice concerning the particular water use under consideration

ITEM 15. Rescind and reserve subrule 567—50.7(5).

ITEM 16. Amend rule 567—50.8 (455B) as follows:

567—50.8(17A,455B) Initial decision by the department.

50.8(1) *Form of decision.* The initial decision on an application shall be a permit or disapproval ~~order~~ issued by the department. Each permit shall include appropriate standard and special conditions consistent with Iowa Code sections 455B.261 to 455B.274, Iowa Code section 455B.281 and 567—Chapters 52 to 54. The decision may

incorporate by reference and attachment the summary report described in 50.7(2). Each decision shall include the following:

- a. Determinations as to whether the project satisfies all relevant criteria not addressed in an attached summary report.
- b. An explanation of the purpose for imposing each special condition.
- c. Explanation of consideration given to all comments submitted pursuant to 50.7(3) and (4) unless the comments are adequately addressed in the attached summary report.

50.8(2) Notice of initial decision. Copies of the initial decision shall be mailed to the applicant, any person who commented pursuant to 50.7(3), and any other person who has requested a copy of the decision. The decision ~~may be sent by ordinary mail, first class,~~ and shall be accompanied by a certification of the date of mailing. An initial decision becomes the final decision of the department unless a timely notice of appeal is filed in accordance with 50.9(17A,455B). The final decision may be filed with the appropriate county recorder to give constructive notice to future landowners of any conditions or requirements imposed by the final decision.

ITEM 17. Amend implementation sentence following rule 567—50.9(455B) as follows:

These rules are intended to implement Iowa Code sections 17A.3, ~~459.29,~~ 455B.105, 455B.171, 455B.262, 455B.264 to 455B.274, 455B.278, ~~and 455B.281,~~ and 460.

ITEM 18. Amend rule 567—51.2(455B) as follows:

567—51.2(455B) Storage (surface). A permit shall be required for the storage of 18 acre-feet or more of water in permanent storage. No such storage permit shall be granted by the department prior to issuance of a ~~department order~~ flood plain permit, if applicable, approving the plans and specifications for the impounding structure. No water storage permit from the department shall be required for waste stabilization lagoons, waste storage basins, or similar structures which are used solely for wastewater treatment or disposal. A storage permit is required for a storm water retention basin or for an open feedlot lagoon under the influence of natural runoff, exceeding the storage permit threshold of 18 acre-feet. A permit authorizing withdrawals of water from an artificial reservoir formed by an officially designated grade stabilization structure which was constructed with federal, state, or local cost-sharing funds shall not be granted unless the person applying for such a permit provides written approval for such withdrawals from the soil and water conservation district in which the structure is located.

ITEM 19. Amend rule 567—51.5(455B) as follows:

567—51.5(455B) ~~Closed e~~Cooling/Heating systems. ~~A permit shall not be granted for the withdrawal of groundwater for use solely as a coolant in a closed system without returning such groundwater to the aquifer from which it came unless applicant demonstrates compelling reasons for not returning the water.~~ A permit for the withdrawal of groundwater for use as a heat exchange media in a heating/cooling system may be granted, allowing such groundwater to be discharged into sanitary or storm sewers (when

the use is complete). However, each permittee, having such system, shall make plan and design provisions to their system to allow the groundwater to be returned directly (e.g., re-injected) to the aquifer from which it was originally pumped. The department reserves the right to order such direct return as part of its water conservation plan responsibility as described in subrule 52.9(3), (chiefly incorporating mandated emergency conservation measures), and its priority allocation plan responsibility as described in subrule 52.10(3).

ITEM 20. Rescind rule 51.6(455B) and adopt the following new rule:

567—51.6(455B) Miscellaneous uses. Unless otherwise provided herein, a permit shall be required for the use of more than 25,000 gallons of water per day for any purpose.

51.6(1) *Reserved.*

51.6(2) *Drainage at construction sites.* Withdrawals of water to lower the water table as necessary at a construction site may obtain permit coverage through registration as described in 51.6(5).

51.6(3) *Test pumping.* The department may authorize, by registration as described in 51.6(5), test pumping of sources of water to determine adequacy of the source and effects of such withdrawals. The department may require the applicant to conduct the test pumping under the supervision of or acquire technical assistance from the department's Iowa geological survey or its designee. No such registration for test pumping shall be for a period of more than one year. A registration must be obtained from the department for any pumping test in which more than 25,000 gallons of water will be withdrawn in a period of 24 or less hours.

51.6(4) *Rural water districts.* A permit shall be required for withdrawals of water by any rural water district having its own source of water and withdrawals shall be classified as a use by community public water supply.

51.6(5) *Permit registration for nonrecurring minor uses.* Any use of water which is a minor, nonrecurring use, including but not limited to highway construction and maintenance, charging of lagoons, drilling wells, and hydrostatic testing of pipelines, shall require permit coverage that may be obtained through registration. If eligible, registration may be completed by submitting DNR form 542-3112. Such registration shall be for up to one year. After an investigation of those withdrawals allegedly causing material damage, the department shall require prompt, appropriate action for the alleviation of damages. Where agreement cannot be reached on the action necessary for the alleviation of damages, withdrawals of water shall cease immediately upon notification by the department and an application for a permit shall be submitted.

51.6(6) *Research contracts.* The withdrawal of water for research purposes by the department's Iowa geological survey (IGS) through its agents, employees, or contractees may be authorized by registration under 51.6(5), which may be subject to conditions set by the department.

ITEM 21. Amend rule 567—51.7(455B) as follows:

567—51.7(455B) Excavation and processing of rock and gravel products. A water permit is required for withdrawal of more than 25,000 gallons of surface or groundwater in one day for dewatering, washing, ~~plugging~~ pugging, or use of a hydraulic dredge in connection with removal or processing of rock or gravel products. This permit requirement is subject to the following exceptions:

1. A permit is not required for operation of a hydraulic dredge which returns all water used as a transport medium directly back into the pit from which it is withdrawn by the dredge;

2. A permit is not required for withdrawal of water from a gravel pit or rock quarry sump pit for material washing if the wash water is discharged directly back into the pit from which it is withdrawn.

ITEM 22. Amend rule 567—51.8(455B) as follows:

567—51.8(159) Agricultural drainage wells. All agricultural drainage wells must be registered by the owner with the department by September 30, 1988, on the form provided by the department. Registration of an agricultural drainage well is not considered a permit as required under rule 51.3(455B) or subrule 51.6(5).

~~These rules are intended to implement Iowa Code sections 159.29, 455B.262,~~

~~455B.264 to 455B.274, 455B.278, and 455E.11 460.~~

ITEM 23. Amend rule 567—52.1(455B) as follows:

567—52.1(455B) Scope of chapter. This chapter contains criteria for issuance of water permits, permit conditions, and conditions under which the department may modify, cancel, or suspend permits. This chapter includes special criteria applicable to particular types of water uses such as irrigation, and criteria applicable to particular types of sources of water such as ~~streams~~ surface waters and groundwater sources.

ITEM 24. Amend subrule 567—52.2(1) as follows:

52.2(1) Irrigation permits.

a. Authorized irrigation season. Permits shall authorize irrigation of any general farm crops ~~such as row crops, small grain and hay~~ from April 1 to September 30 and any specialty crops ~~such as vegetables, fruits, and sod~~ from April 1 to October 31 unless the department finds that a different period is justified.

b. Authorized annual amount. Permits shall authorize withdrawals equivalent to ~~42 acre-inches~~ 1 acre-foot per acre for a general farm crops and ~~24 acre-inches~~ 2 acre-feet per acre for a specialty crops unless the department finds that a different amount is justified. Factors to be considered in determining whether a different amount is justified include soil types and potential water availability during drought events. Notwithstanding the general criteria in this paragraph, permits for irrigation of general ~~farm~~ crops from the alluvial aquifers of the Missouri and Mississippi Rivers shall authorize withdrawals of up to ~~48 acre-inches~~ 1.5 acre-feet per acre if requested by the applicant unless the department finds that a different amount is justified.

c. Conservation plan for erosion control. When 567—subrule 50.6(2) requires that an applicant for an irrigation permit submit a soil conservation plan, any permit granted to the applicant shall make authorization of irrigation contingent upon the permittee's compliance with the soil conservation plan.

d. Irrigation scheduling. The department may require that irrigation of a general farm crops be scheduled according to a method recommended by the department to minimize the potential for waste of water or by an equivalent method selected by the permittee and approved by the department.

e. Irrigation system check valve. Each irrigation permit shall require the permittee to ~~submit documentation that an adequate check valve has been installed~~ install an adequate check valve and conduct frequent inspections for the proper functioning of the check valve to prevent back-siphoning of contaminants into the water source before a fertilizer, pesticide, herbicide, or other additive is introduced into the irrigation system.

ITEM 25. Amend paragraph 567—52.2(4)"b" as follows:

b. Watering system backflow-prevention valve. Each permit authorizing the use of water for turf or landscape plantings shall require the permittee to ~~submit documentation that an adequate check valve has been installed~~ install an adequate check valve and conduct frequent inspections for the proper functioning of the check valve to prevent back-siphoning of contaminants into the water source before a fertilizer, pesticide, herbicide or other additive is introduced into the irrigation system.

This rule is intended to implement Iowa Code section 455B.265.

ITEM 26. Amend paragraph 567—52.3(1)"a" as follows:

a. Two hundred gallon per minute (200 gpm) restriction. New withdrawals of water for consumptive uses shall not be in excess of 200 gallons per minute (200 gpm) on an aggregate basis. ~~Permits in effect on July 5, 1978, that authorize withdrawals in excess of 200 gallons per minute (200 gpm) for consumptive uses, upon renewal, shall not authorize withdrawals in excess of 200 gallons per minute (200 gpm) after December 31, 1988.~~ However, the department may authorize withdrawals in excess of 200 gallons per minute (200 gpm) for storage purposes during high stream flows, taking into account other permitted withdrawals on the stream reach.

ITEM 27. Amend paragraph 567—52.3(1)"b" as follows:

b. Protected flow restriction. Except as provided in 52.3(1)"c," withdrawals for consumptive uses, with the exception of community public water supplies, shall cease when the stream flow is below the protected flow designated in rule 52.8(455B). When the flow of a stream, or portion thereof designated by the department, is below a flow equal to the protected flow plus the summation of all permitted consumptive withdrawals by permittees whose permits provide for maintenance of a protected flow in such stream or portion thereof, the department may, subject to the provisions of 52.3(1)"c," order temporary cessation or rotation of all consumptive withdrawals, with the exception of community public water supplies, to ensure that the protected flow is preserved.

ITEM 28. Rescind and reserve paragraph 567—52.3(1)"d".

ITEM 29. Amend paragraph 567—52.3(2)"a" as follows:

a. Protected flow restriction. Except as provided in 52.3(2)“b” ~~to 52.3(2)“d,”~~ withdrawals for consumptive uses, with the exception of community public water supplies, shall cease when the stream flow is below the protected flow designated in rule 52.8(455B). When the flow of a stream, or portion thereof designated by the department, is below a flow equal to the protected flow plus the summation of all permitted consumptive withdrawals by permittees whose permits provide for maintenance of a protected flow in said stream or portion thereof, the department may, subject to the provisions of 52.3(2)“b,” ~~to 52.3(2)“d,”~~ order temporary cessation or rotation of all consumptive withdrawals, with the exception of community public water supplies, to ensure that the protected flow is preserved.

ITEM 30. Rescind and reserve paragraphs 567—52.3(2)“c” through “e”.

ITEM 31. Amend subrule 567—52.4(1) as follows:

52.4(1) *Withdrawals from ~~unconsolidated~~ unconfined aquifers adjacent to streams draining less than 50 square miles.* Withdrawals of water from ~~unconsolidated~~ unconfined aquifers adjacent to streams draining less than 50 square miles shall be subject to the following conditions:

a. Two hundred gallon per minute (200 gpm) restriction. New withdrawals for a consumptive use at any location within ¼ mile (1320 feet) of a stream shall not be in excess of 200 gallons per minute (200 gpm), except when the applicant can conclusively demonstrate by conducting appropriate tests that withdrawals in excess of 200 gallons per minute (200 gpm) will not reduce the flow of the stream. ~~Permits in effect on July 5, 1978, that authorize withdrawals in excess of 200 gallons per minute (200 gpm) for consumptive uses at such locations, upon renewal, shall not authorize withdrawals in excess of 200 gallons per minute (200 gpm) after December 31, 1988.~~ However, the department may authorize withdrawals in excess of 200 gallons per minute (200 gpm) for storage purposes during high stream flows.

b. Protected flow restriction. Except as provided in 52.4(1)“c” and 52.4(1)“e,” withdrawals for consumptive uses, with the exception of community public water supplies, at any point within 1/8 mile (660 feet) of a stream shall be considered withdrawals from the stream and shall cease when the stream is below the protected flow designated in rule 52.8(455B), unless the applicant or permittee can conclusively demonstrate by conducting appropriate tests that the withdrawal will not reduce the flow of the stream. ~~This protected flow restriction shall not apply until January 1, 1989, to withdrawals pursuant to a permit that was in effect on July 5, 1978, and authorized withdrawals for a consumptive use without a condition as of July 5, 1978, for maintenance of a protected flow. Withdrawals pursuant to the renewal of any such permit shall be likewise exempted.~~

c. Border stream-interior stream confluence restriction. Withdrawals for consumptive uses, with the exception of community public water supplies, from the alluvial aquifers below the floodplains of streams bordering the state at any point within 1/8 mile (660 feet) of any interior stream, shall cease when the flow of such interior stream is at or below the seven-day, one-in-ten year (7Q10) low flow, except as provided in 52.4(1)“d.”

d. Other conditions. Notwithstanding 52.4(1)“a” to 52.4(1)“c,” other conditions may be imposed that are necessary to ensure adequate protection of water supplies for ordinary household, livestock, and domestic uses, for fish and wildlife, for recreational

use, for the preservation and enhancement of aesthetic values, and for other uses of a public nature.

e. Replacement water exemption. Rules 52.4(1)“a” to 52.4(1)“c” shall not apply to withdrawals for consumptive uses from an ~~unconsolidated~~ unconfined aquifer if the permittee discharges replacement water into such stream or tributary thereto at rates sufficient to offset the consumptive withdrawals and the department approves the method and location of discharge.

~~*f. Exemption until July 1, 1991, for certain users.* Paragraphs 52.4(1)“a,” “b” and “c” shall not apply until July 1, 1991, to uses that were nonregulated prior to July 1, 1985, provided the application for said permit is postmarked or received prior to July 2, 1986. Reserved.~~

ITEM 32. Amend subrule 567—52.4(2) as follows:

52.4(2) Withdrawals from ~~unconsolidated~~ unconfined aquifers adjacent to streams draining 50 or more square miles. Withdrawals of water from ~~unconsolidated~~ unconfined aquifers adjacent to streams draining 50 or more square miles shall be subject to the following conditions:

a. Protected flow restriction. Withdrawals for consumptive uses, with the exception of community public water supplies, at any point within 1/8 mile (660 feet) of a stream shall be considered withdrawals from the stream and shall cease when the stream is below the protected flow designated in rule 52.8(455B), except as provided in 52.4(2)“c” to 52.4(2)“f.”

b. Seven-day, one-in-ten year low flow restriction. Withdrawals for consumptive uses, with the exception of community public water supplies, at any point located between 1/8 mile (660 feet) and 1/4 mile (1320 feet) of a stream, other than a stream bordering the state, shall cease when the stream flow is at or below the seven-day, one-in-ten year low flow (7Q10 flow), except as provided in 52.4(2)“c” to 52.4(2)“f.”

c. Border stream-interior stream confluence restriction. Withdrawals for consumptive uses, with the exception of community public water supplies, from the alluvial aquifers below the floodplains of streams bordering the state at any point within 1/8 mile (660 feet) of any interior stream shall cease when the flow of such interior stream is at or below the seven-day, one-in-ten year (7Q10) low flow, except as provided in 52.4(2)“d.”

d. Other conditions. Notwithstanding 52.4(2)“a” to 52.4(2)“c,” other conditions may be imposed if they are necessary to ensure adequate protection of water supplies for ordinary household, livestock, and domestic uses, for fish and wildlife, for recreational use, for the preservation and the enhancement of aesthetic values, and for other uses of a public nature.

e. Replacement water exemption. Paragraphs 52.4(2)“a” to 52.4(2)“c” shall not apply to withdrawals for consumptive uses from an ~~unconsolidated~~ unconfined aquifer, if the permittee discharges replacement water into such stream or tributary thereto at rates sufficient to offset the consumptive withdrawals and the department approves the method and location of discharge.

f. Exemptions from low flow restrictions. The restrictions of 52.4(2)“a” to 52.4(2)“d” may be waived if the applicant or permittee can conclusively demonstrate by conducting appropriate tests to demonstrate that the withdrawal will not reduce the flow of the adjacent stream. The plan for testing must be approved by the department prior to conducting the tests. ~~Withdrawals pursuant to a permit, which was in effect on July 5,~~

1978, and authorized withdrawals for a consumptive use without a condition as of July 5, 1978, for maintenance of the protected flow, and withdrawals pursuant to the renewals of such permit shall be exempt from paragraphs 52.4(2)“a” to 52.4(2)“d” under the conditions for exemption specified in 52.3(2)“c” and 52.3(2)“d.” Withdrawals eligible for the exemptions of 52.3(2)“c” and 52.3(2)“d,” if shifted from a stream to an adjacent unconsolidated aquifer, shall not lose the exemptions granted under the conditions of 52.3(2)“c” and 52.3(2)“d.”

~~g. Exemption until July 1, 1991, for certain users. Paragraphs 52.4(2)“a,” “b” and “c” shall not apply until July 1, 1991, to uses that were nonregulated prior to July 1, 1985, provided the application for said permit is postmarked or received prior to July 2, 1986.~~ Reserved.

ITEM 33. Amend subrule 567—52.4(3) as follows:

52.4(3) Withdrawals from the Cambrian Jordan Sandstone Aquifer. Withdrawals of water from the Cambrian Jordan Sandstone Aquifer including the Prairie Du Chien formation and the St. Lawrence formation shall be subject to the following conditions:

a. *Two hundred gallon per minute (200 gpm) restriction on irrigation use and recreational and aesthetic use.* New withdrawals of water for irrigation and recreational and aesthetic uses shall not be in excess of 200 gallons per minute (200 gpm). Existing permits for irrigation and recreational and aesthetic uses that authorize withdrawal rates in excess of 200 gallons per minute (200 gpm) ~~shall not be renewed~~ may be modified by the department if serious impact on other water withdrawals or on groundwater piezometric levels occur or are forecasted to occur, any well in the vicinity experiences loss of water due to drawdown effects or if the piezometric level is reduced significantly, according to the department.

b. *Two thousand gallon per minute (2000 gpm) restriction on industrial use and power generation use.* New withdrawals of water for industrial and power generation uses at one plant location shall not exceed 2,000 gallons per minute (2000 gpm).

c. *Two hundred (200) foot limit on the decline of groundwater piezometric levels.* The maximum collective long-term decline in groundwater piezometric levels in the Cambrian Jordan Sandstone Aquifer in any high use area will not be permitted to exceed 200 feet from the 1977 baseline as determined from available records of the Iowa geological bureau survey.

d. *Variances.* Variances from the restrictions imposed by ~~subrule 52.3(3)~~ these rules will be considered by the department through the ~~appeal~~ procedures in ~~567—Chapter 7~~ 561- Chapter 10.

ITEM 34. Amend subrule 567—52.4(4) as follows:

52.4(4) Withdrawals from the Dakota Sandstone formation of the Cretaceous system. The department may issue permits authorizing withdrawals of water from the Dakota Sandstone formation of the Cretaceous system for all beneficial uses under the following conditions:

a. *Inventory of nearby wells by applicant.* An applicant who requests authorization for withdrawals of water at a maximum rate in excess of 200 gallons per minute shall conduct and submit an inventory of nearby wells as described in 567—paragraph 50.6(1)“b.”

b. Observation wells. In addition to the requirement of 52.6(3) for construction of an access port to allow measurement of water levels in each production well, an applicant or permittee may also be required to construct, maintain, and monitor observation wells as a condition of obtaining or keeping a water permit if the department, after consultation with the Iowa geological survey bureau, finds observation wells necessary to monitor the effects of the proposed or authorized withdrawals of water. Observation wells must be properly constructed and responsive developed to respond to water level fluctuations in the aquifer. Plans for and monitoring with the observation wells must be approved by the department.

c. Prohibition of excessive water level declines. If the department, after consultation with the Iowa geological survey bureau, determines that withdrawals of water from the Dakota Sandstone formation of the Cretaceous system within a designated geographical area are causing water level declines which constitute a significant threat to the public interest in the availability of water for sustained beneficial use of the aquifer, renewals of permits shall be denied, and permits shall be modified or canceled in accordance with procedures in Iowa Code section 455B.271, as necessary to protect the aquifer for sustained use.

d. Priorities in renewal, modification and cancellation of permits. If permit renewals must be denied or if permits must be modified or canceled to prevent or abate water level declines which constitute a significant threat to the public interest in the availability of water for sustained beneficial use of the aquifer, withdrawals of water for community public water supplies ~~and for agricultural research~~ shall have priority over withdrawals of water for other regulated uses. The priority list for water use can be found in 52.10(3).

~~This rule is intended to implement Iowa Code sections 455B.261, 455B.264, 455B.266, 455B.271 and 455B.272.~~

ITEM 35. Amend subrule 567—52.6(1) as follows:

52.6(1) Water use reports. Each permittee shall submit to the department reports, at least annually, as prescribed by the department, of water used, diverted, or stored and any other information deemed necessary by the department.

ITEM 36. Amend subrule 567—52.6(4) as follows:

52.6(4) Aquifer tests and observation wells. A permittee may be required to conduct a controlled aquifer test as a condition of keeping a water permit if the department, after consultation with the department's Iowa geological survey bureau, finds an aquifer test to be necessary to determine the effects which the authorized withdrawals have on other water uses. A controlled aquifer test, authorized by the department and supervised by a ~~registered well driller~~ certified well contractor, registered professional engineer or other designee of the department, may be required for an administrative resolution of a well interference conflict pursuant to 567—Chapter 54. The permittee may be required to construct, develop, and maintain adequate observation wells for use in an aquifer test and for subsequent water level measurements or water quality monitoring.

This rule is intended to implement Iowa Code sections 455B.261, 455B.264, 455B.266, 455B.268(1) and 455B.281.

ITEM 37. Amend subrule 567—52.7(1) as follows:

52.7(1) General. Except as provided in subrule 52.7(2), after at least 30 days' written notice mailed to the permittee's last-known address by ~~restricted~~ certified mail ~~or personal service~~, and an opportunity for the permittee to be heard in an evidentiary hearing conducted according to the contested case provisions of Iowa Code chapter 17A, the department may modify or cancel a water permit or any condition of a permit, notwithstanding any other rule, for any of the following:

a. Breach of permit condition or law. A condition of the permit has been breached or the law pertaining to the permit has been violated by the permittee or permittee's agent, tenant, or consultant.

b. Nonuse. The permittee has failed for three consecutive years to use the water, and the permittee has not demonstrated adequate plans to use water within a reasonable time. Nonuse due to adequate rainfall shall not be a justification for cancellation of a permit. However, authorization to withdraw water from a proposed well may be canceled after notice to the permittee if the permittee has failed to construct the proposed well within three years after issuance of the permit.

c. Public health and safety. Modification or cancellation is necessary to protect the public health and safety, to protect the public interests in lands and waters, or to prevent any manner of substantial injury to persons or property.

d. Addition of conservation provisions. Modification to include conservation provisions is deemed necessary by the department.

e. Allocated amount. Annual water use has exceeded the amount of water allocated in the permit for three consecutive years.

ITEM 38. Amend subrule 567—52.7(2) as follows:

52.7(2) Emergency suspension or restriction. Notwithstanding any other rule or permit conditions, if the department finds that it is imperatively necessary in an emergency to protect from imminent danger of substantial injury the public health, welfare or safety, the public or private interest in lands or water, or to implement the priority allocation system pursuant to rule 52.10(455B), and these findings are incorporated into a written emergency order to the permittee, then the department may immediately suspend or restrict operations under a permit and require the permittee to take measures necessary to prevent or remedy the injury. The emergency order shall state an effective date appropriate to the situation which invoked the suspension or restriction and shall be immediately effective on that date unless stayed, modified, or vacated at a hearing before the commission or by the court. The emergency order shall remain in effect until a date specified in the order, unless the order is revoked or the expiration date modified, due to a change in the situation giving rise to the order or a decision following appeal.

This rule is intended to implement Iowa Code sections 455B.271, 455B.272 and 17A.48(3).

ITEM 39. Amend subrule 567—52.8(2) as follows:

52.8(2) Protected flow basis. The protected flow is based in part on statistical information contained in "Low-Flow Characteristics of Iowa Streams," (INRC Bulletin No. 9 (1958)), "Low-Flow Characteristics of Iowa Streams through 1966," (INRC

Bulletin No. 10 (1970)), ~~and~~ “Annual and Seasonal Low-Flow Characteristics of Iowa Streams,” (INRC Bulletin No. 13 (1976)), and “Statistical Summaries of Selected Iowa Streamflow Data Through September 1996, U.S. Geological Survey Open-File Report 98-176 (1998).”

ITEM 40. Rescind the following six entries from the table in subrule 567—52.8(3).

The Protected Flow at U.S.G.S. Stream Gaging Locations

River or Stream	Gage Location	Protected Low Flow (CFS)
Des Moines River	Estherville	22
East Branch Iowa River	Klemme	6
Lizard Creek	Clare	4.2
Shell Rock River	Northwood	23
Tarkio River	Stanton	0.3
West Branch Floyd River	Struble	0.85

ITEM 41. Amend the second introductory paragraph in subrule 567—52.9(1) as follows:

52.9(1) General. The purpose of water conservation requirements is to preserve the availability of water which is withdrawn for use, as opposed to protected flow provisions in rules 52.3(455B), 52.4(455B), and 52.8(455B) which preserve in stream flows.

Each permit granted after July 1, 1986, including any permit granted to a community water supply, will include conditions requiring routine (day-to-day) conservation practices, and requiring emergency conservation practices after notification by the department. Existing permits may be modified to include conservation conditions pursuant to 52.7(1) “d,” if deemed necessary by the department.

ITEM 42. Amend subrule 567—52.9(2) as follows:

52.9(2) Applicability of emergency conservation. Specific emergency conservation requirements may be made a condition of a water withdrawal permit if the proposed or permitted withdrawal could result in a significant consumptive use of water from a source which is likely to experience a short-term shortage.

A determination of the consumptive nature of a water use will be based on the hydrologic relationship of the sources of water withdrawal and wastewater discharge.

If the source of withdrawal and discharge are the same, the consumptive use from the source will be considered to be the amount of water withdrawal minus the wastewater discharge. If the sources of withdrawal and discharge are hydrologically independent, then consumptive use from the source of withdrawal will be considered to be the total

amount of withdrawal. Water sources which are in close hydrologic connection (e.g., an alluvial aquifer and adjacent stream) will be considered as the same source.

~~Specific emergency conservation requirements will not normally be included in a water use permit under any of the following conditions:~~

a. The proposed or existing permitted water use involves a consumptive use of less than 25,000 gallons per day from any water source during periods of substantial water shortage.

b. The proposed or permitted use is subject to protected stream flow conditions pursuant to rules 52.3(455B), 52.4(455B), and 52.8(455B).

c. The water source for the proposed or permitted use is from a surface water impoundment or purchased storage owned by the applicant or permittee.

d. The proposed or permitted use is unable to conserve water without substantially disrupting or ceasing an essential activity which requires water, such as operating a steam electric generating plant, watering livestock, or operating a commercial laundry.

e. The proposed or permitted withdrawal is from a source of water which is not likely to experience a substantial short-term water shortage including, but not limited to, the Missouri and Mississippi Rivers and adjacent alluvial aquifers, the Jordan Sandstone Aquifer, and the Iowa Great Lakes.

f. The source of water is or will be utilized by only the permitted or proposed water user and withdrawal from the source for the permitted or proposed use has no potential for affecting other water uses.

ITEM 43. Amend paragraph 567—52.9(3)"*b*" as follows:

b. Routine conservation provisions. Consideration of routine conservation is encouraged although it is not normally required in a water conservation plan. Documented water savings from routine conservation measures will be credited towards emergency conservation requirements. Suggested routine conservation measures include:

(1) Use of water-saving plumbing devices or required use of these devices in building codes.

(2) Scheduling irrigation to minimize peak water use.

(3) Use of efficient irrigation techniques.

(4) Implementing programs to minimize lost water, such as ~~pipe~~ pipings distribution system leaks.

(5) Use of metered water billing by public water supplies.

(6) Utilizing best commercially available technology to optimize efficiency of water use.

(7) Implementing recycling and reuse practices.

(8) Developing alternative water sources which are not susceptible or are less susceptible to shortages.

(9) Increasing rates charged for water or eliminating reduced rates for large users.

ITEM 44. Amend subparagraph 567—52.9(3)"*c*"(3) as follows:

(3) Irrigation water use. Emergency water conservation plans for irrigation water uses shall limit irrigation water use to the equivalent of one inch per irrigated acre per week for general ~~farm~~ crops and specialty crops, unless the water conservation plan contains other mitigating provisions such as listed in 52.9(3)"c"(1) above.

Water conservation plans shall also address irrigation scheduling. Irrigation scheduling should attempt to provide approximately equal water use on each day of an irrigation cycle. Irrigation scheduling may be done in cooperation with other nearby irrigators who utilize the same water source.

ITEM 45. Amend the paragraph 567—52.10(2)"c" as follows:

c. Determination by the department in conjunction with the ~~office of disaster services~~ Iowa department of public defense' homeland security and management division of a local crisis which affects availability of water.

ITEM 46. Amend the paragraph 567—52.10(2)"d" as follows:

d. Receipt of information from a state or federal natural resource, research or climatological agency (including the National Drought Monitor) indicating that a drought of local or state magnitude is imminent. As a general guideline, emergency conservation or priority allocation restrictions will not be imposed on withdrawals from a surface stream or adjacent alluvial aquifer when stream flow is above the seven-day, one-in-ten-year lowflow level.

ITEM 47. Amend the paragraph 567—52.10(3)"c" as follows:

c. Uses of water for the irrigation of any general crop ~~hay, corn, soybeans, oats, grain sorghum or wheat.~~

ITEM 48. Amend the paragraph 567—52.10(3)"d" as follows:

d. Uses of water for the irrigation of any specialty crops ~~other than hay, corn, soybeans, oats, grain sorghum or wheat.~~

ITEM 49. Amend rule 567—52.11(455B) as follows:

567—52.11(455B) Plugging of abandoned wells. When authorization for withdrawals of water from a well expires without renewal, the permittee shall be responsible for plugging the well in accordance with Iowa Code section 455B.190, 567—Chapter 39, and Iowa Geological Survey Public Information Circular #1, "Well Plugging Procedures," or by an alternate method approved by the department for prevention of groundwater pollution. Form 542-1226 (Abandoned Water Well Plugging Record) must be completed and submitted as specified on the form. However, the department shall grant a variance from the requirement that the well be plugged if the permittee demonstrates an intent to maintain the well as a source of water for a nonregulated use or if the department determines that the well should be maintained as an observation well.

~~This rule is intended to implement Iowa Code sections 455B.262 and 455B.263 to 455B.279(2).~~

ITEM 50. Amend the rule 567—53.2(455B) as follows:

567—53.2(455B) Designation of protected sources. The department, after consultation with the department's Iowa geological survey bureau ~~bureau of the department~~ and other authorities, may designate a surface water or groundwater source within a defined geographical area as a protected source.

Notwithstanding rules 53.3(455B) to 53.7(455B) the department may impose permit conditions on a case-by-case basis as it determines ~~are~~ necessary to protect water resources of the state.

This rule is intended to implement Iowa Code sections 455B.262, 455B.264 through 455B.274 and 455B.278.

ITEM 51. Amend the preamble to rule 567—53.4(455B) as follows:

567—53.4(455B) Designation procedure. The procedure for designation of a protected source shall be a rule-making proceeding to amend the list of protected sources in rule 53.7(455B). In addition to the requirements of ~~567—subrule 5.2(2)~~ 561—5.1, as adopted by reference by 567—Chapter 5, an interested person who petitions the department to designate a protected water source may also be required to provide further supporting information including, but not limited to:

ITEM 52. Amend subrule 567—53.7(1) as follows:

53.7(1) *Ralston Site, Linn County.* The area within a one-mile radius of a point which is 600 feet south of the midpoint of the northern edge of Section 2, Township 83 North, Range 7 West in Linn County is a protected water source. Any new application for a permit to withdraw groundwater or to increase an existing permitted withdrawal of groundwater from within the protected water source area will be restricted or denied, if necessary to preserve public health and welfare or to minimize movement of groundwater contaminants from the Ralston Site. The Ralston Site is identified in the Registry of Hazardous Waste or Hazardous Substance Disposal Sites pursuant to Iowa Code section 455B.426.

Withdrawal of groundwater from within the protected water source area may also be restricted or denied from what would otherwise be nonregulated wells, if necessary to preserve public health and welfare or to minimize movement of groundwater contaminants from the Ralston Site. The Linn County health department will refer any application for a construction permit for a private well within the protected water source area to the department's water supply section who will, after consultation with the department's Iowa geological survey bureau, determine whether the proposed well will be allowed.

ITEM 53. Amend paragraph 567—54.7(2)"a" as follows:

a. Written comments by a ~~registered~~ certified well ~~driller~~ contractor or ~~registered~~ licensed professional engineer detailing well improvements needed in order to provide the complainant with a sufficient water supply.

ITEM 54. Amend paragraph 567—54.7(2)"b" as follows:

b. Itemized costs of the improvements by a ~~registered~~ certified well ~~driller~~ contractor with a breakdown of costs eligible for compensation (see subrule 54.7(3) and guidelines in Bulletin No. 23).

ITEM 55. Amend subrule 567—54.7(4) as follows:

54.7(4) *Complainant's response to the offer.* The complainant shall respond in writing to the department within 15 days of receipt of the offer. The response shall indicate acceptance or rejection of the offer. If the offer is rejected, the complainant shall submit a counteroffer with the response. The counteroffer shall contain supporting information including an itemized cost estimate of needed improvements by a ~~registered~~ certified well ~~driller~~ contractor or ~~registered~~ licensed professional engineer, if appropriate.